Mylyn 3.6 Release Review

Planned Review Date: June 8, 2011
Communication Channel: mylyn-dev@eclipse.org

Introduction

- The Mylyn Application Lifecycle Tools Top-Level Project is an open source collaborative software development project dedicated to providing an extensible, standards-based platform to address a broad range of needs of accessing task and application lifecycle management tools and services using the Eclipse platform.

- The mission of the project is to provide:

  - Frameworks and APIs for Eclipse-based task and Application Lifecycle Management (ALM)
  - Exemplary tools for task-focused programming within the Eclipse IDE.
  - Reference implementations for open source ALM tools used by the Eclipse community and for open ALM standards such as OSLC

Overview

- The Mylyn project was created in 2005 as a Technology project and moved to the Tools top-level project in 2007. Mylyn was restructured and promoted to a top-level project in 2010.

- In order to keep up with its rate of adoption, the Mylyn project is continuing to evolve APIs for Application Lifecycle Management (ALM) tools. Since its inception, Mylyn has released multiple times per annual release cycle, and is continuing to do that for Indigo.

Mylyn

The Mylyn 3.6 release includes the following sub-projects:

- Mylyn Builds
- Mylyn Commons
- Mylyn Context
- Mylyn Docs
- Mylyn Reviews
- Mylyn Tasks
- Mylyn Versions

Project Plan:

- http://eclipse.org/projects/project-plan.php?projectid=mylyn

New Features

- http://eclipse.org/mylyn/new/weekly.php

Mylyn Builds

Deliverables included in Mylyn Builds 0.8:
- Builds Framework
- Hudson/Jenkins Connector

Project Plan:
- http://eclipse.org/projects/project-plan.php?projectid=mylyn.builds

Supported Build Servers:
- Hudson 1.367 and later
- Jenkins 1.367 and later

New Features:
- Tasks generated from build failures contain stack traces that are used to automatically generate contexts on task activation.

Mylyn Commons

Deliverables included in Mylyn Commons 3.6:

- Commons Framework

Project Plan:

- http://eclipse.org/projects/project-plan.php?projectid=mylyn.commons

New Features:

- The identity framework provides supports for linking repository accounts to Gravatar images.
- The screenshot tool supports delayed capturing.

Mylyn Context

Deliverables included in Mylyn Context 3.6:

- Context Framework
- Java Bridge
- C/C++ Bridge
- PDE Bridge
- Resource Bridge
- IDE Integration

Project Plan:

- http://eclipse.org/projects/project-plan.php?projectid=mylyn.context

New Features:

- Contexts for tasks with stack traces are automatically generated on task activation.
- Contexts for non active tasks are now browseable.

Mylyn Docs

Deliverables included in Mylyn Docs 1.5:

- HtmlText
- WikiText

Project Plan:

- http://eclipse.org/projects/project-plan.php?projectid=mylyn.docs

New Features:

- The HtmlText component provides enhanced configuration options.

Mylyn Incubator

Mylyn Incubator does not do releases by definition and does not participate in Mylyn releases.

Changes:

- Initial work on a context bridge for EMF has been started.

Mylyn Reviews

- Deliverables included in Mylyn Reviews 0.8:
  - Gerrit Connector
  - Reviews Framework

Project Plan:
- http://eclipse.org/projects/project-plan.php?projectid=mylyn.reviews

Supported Review Systems:
- Gerrit 2.1.5 and later

New Features:
- Review comments can be submitted inline from the compare editor.
- Gerrit patch sets can be fetched directly into the workspace.

Mylyn Tasks

- Deliverable included in Mylyn Tasks 3.6:
    - Bugzilla Connector
    - Tasks Framework
    - Trac Connector
- Project Plan:
    - http://eclipse.org/projects/project-plan.php?projectid=mylyn.tasks
- Supported Task Repositories:
    - Bugzilla 3.0 – 4.0
    - Trac 0.10 – 0.12
- New Features
    - The Task Editor shows Gravatar images if task repository accounts map to Gravatar accounts
    - Private comments are shown for Bugzilla tasks
    - The history of changes for Bugzilla and Trac tasks is accessible from the History view
    - Certificate authentication is supported for Trac repositories.

Mylyn Versions

Deliverables included in Mylyn Versions 0.8:

- CVS Connector
- Git Connector

Project Plan:

- http://eclipse.org/projects/project-plan.php?projectid=mylyn.versions

New Features:

- The Git connector provides a dialog for selecting change sets.

Non-code aspects(1)

- Localization/externalization
    - The code base has been externalized for Mylyn 3.1.
    - Mylyn is now available for translation via Eclipse Babel.
- User documentation
    - Eclipse help content that is generated from the Wiki has been added for Mylyn 3.1.
    - The webinar on Mylyn 3.0 is the most viewed webinar on Eclipse Live.
    - The web site has been restructured for easier access to Downloads, Support and Getting Started documentation.
- Developer documentation
    - Wiki-based Contributors Guide
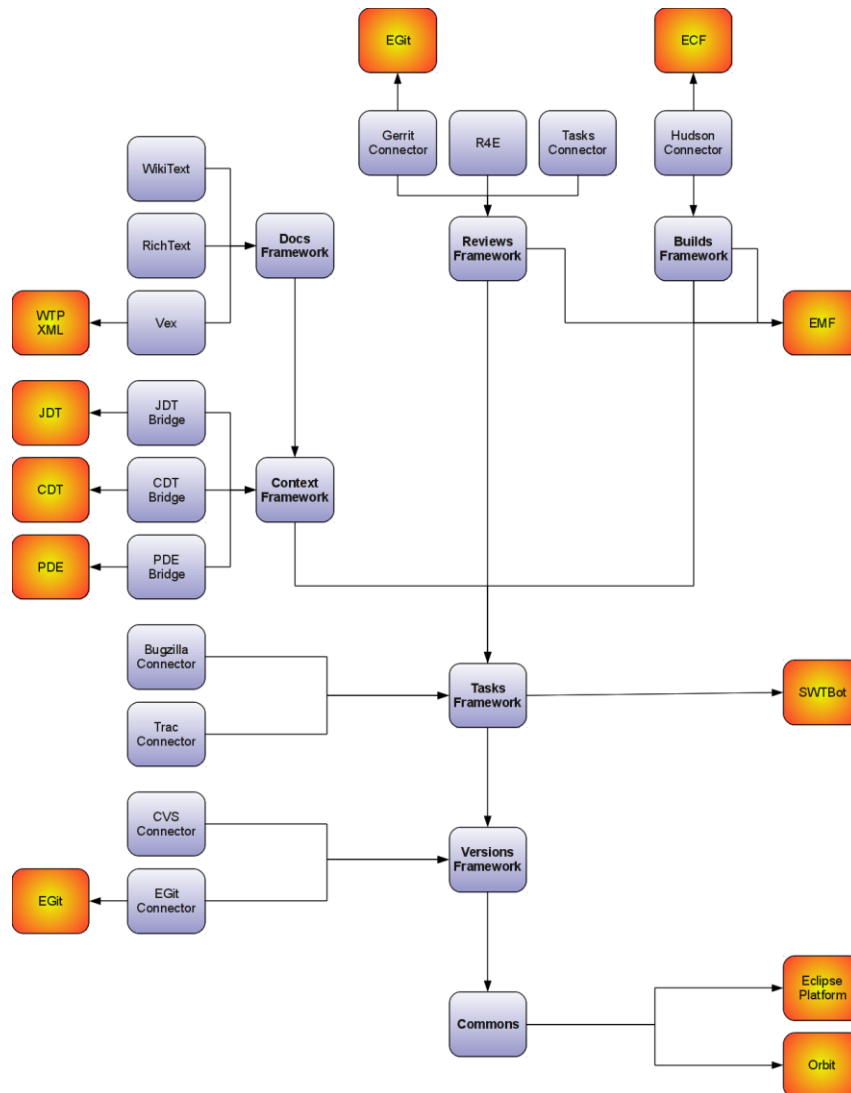   - Wiki-based Integrators Guide

Non-code aspects(2)

- Release Engineering
  - The build system is based on Maven Tycho.
- Continuous Integration
  - Tests are executed on a regular schedule on the Eclipse.org Hudson instance
  - Test results and build artifacts are available to anyone.

APIs

- No breaking API changes from 3.0
- API tooling is used verify that binary backwards compatibility is maintained and no API regressions are introduced.
- APIs are consumed by 3rd parties who provide regular feedback
- All API changes are tracked in Bugzilla on bugs tagged as [api]

  - Notes on API additions since Mylyn 3.0: http://wiki.eclipse.org/Mylyn/Porting_Guide

- Connector core APIs are available to standalone environments and do not require an OSGi container

Frameworks

- Builds API
- Commons API
  - Communication API
  - Identity API
  - Monitor API
- Context API
- Reviews API
- Tasks API
  - Team API
- Versions API
- WikiText API

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Architectural Issues (Unchanged since 3.3)

- For Mylyn 3.3 pooling of network connections has been fixed which uncovered connection leaks in several connector implementations.
- For Mylyn 3.1 processing of resource change events has been optimized to avoid a negative impact on performance when rebuilding large workspace while a task is active.
- For Mylyn 3.1 scheduling rules and locking for concurrently running jobs have been reviewed and problems were addressed.
- For Mylyn 3.0 API tooling was adopted and API baselines have been made available for download.
- For Mylyn 2.3 a new kind of bundle activator for the Task-Focused UI was created and all known issues with startup concurrency, performance and laziness were addressed.

Tool Usability (Unchanged since 3.0)

- Maturity
  - Constant stream of stable releases
  - Bundled as part of EPP distributions
  - Committers work from HEAD, contributors from weekly builds, community from milestone releases
- User feedback says it best
  - "..arguably the most productivity-enhancing idea since background compilation and all of the things that enables (namely refactoring and syntax highlighting). I just don't know how I ever was able to read and understand the Eclipse sources (or the sources of other large projects I've worked on) before Mylar, it's just that good." (David Orme)
  - "I would like to commend you on this very good tool. It has increased my productivity by 3 folds - no kidding..." (Deepak Devje)
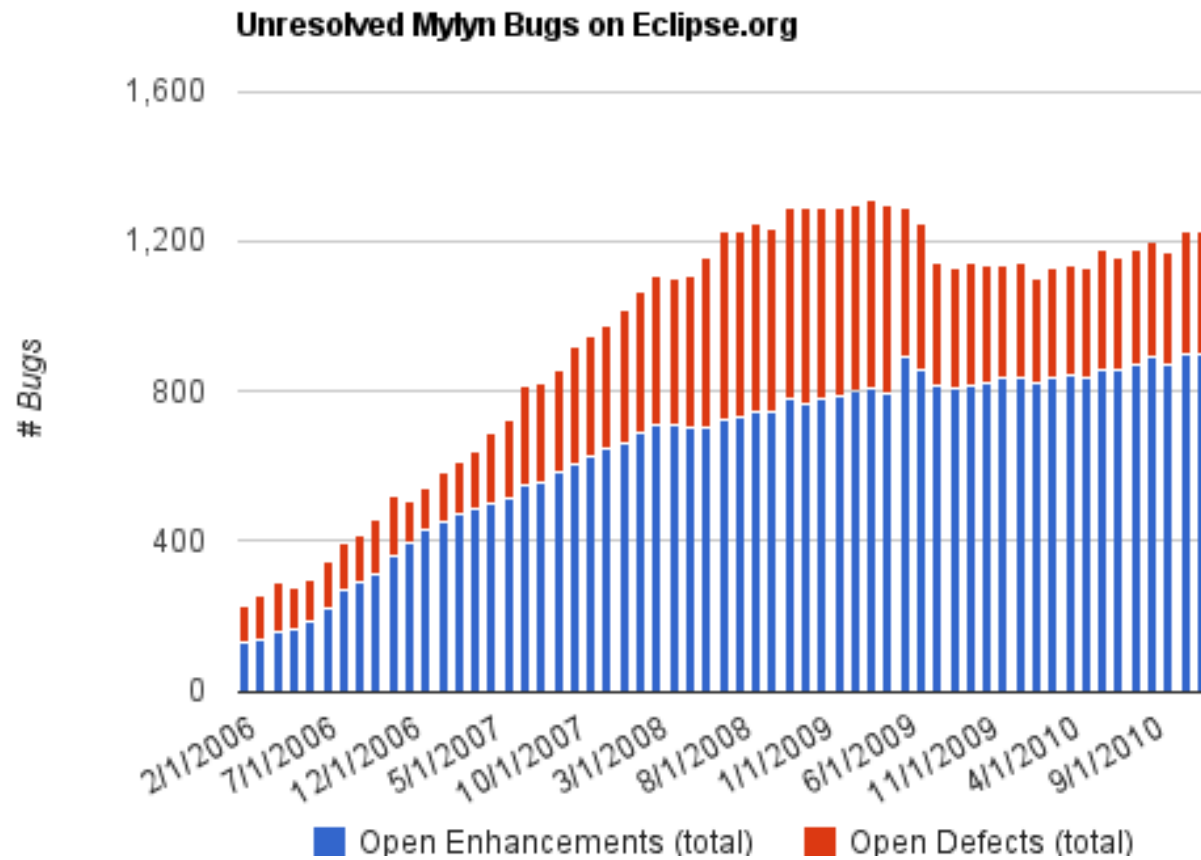
End-of-Life

Active Streams:
- Mylyn 3.6 supports Eclipse 3.7, 3.6, and 3.5 from HEAD.

End-of-Live Streams:
- Mylyn 3.5 support Eclipse 3.7M6, 3.6, and 3.5 from HEAD.
  - The XPlanner Component has been archived.
  - Support for Eclipse 3.4 has ended.
- Mylyn 3.4 support Eclipse 3.6, 3.5 and 3.4 from HEAD.
  - The JIRA Component has moved to Atlassian.
- Mylyn 3.3 supports Eclipse 3.6M2, 3.5 and 3.4 from HEAD.
  - Support for Eclipse 3.3 has ended.
- Mylyn 3.2 supports Eclipse 3.5 and 3.4 from HEAD and Eclipse 3.3 via a separate branch.
- Mylyn 3.1 supports Eclipse 3.4 and 3.3 via separate branches.
- All Mylyn 3.0 streams have reached end-of-life
- All Mylyn 2.0 streams have reached end-of-life.

Bugzilla

- Bugs resolved
  - Mylyn 3.6 (June 22, 2011): 93 (as of May 30, 2011)
  - Mylyn 3.5 (March 16, 2011): 324
  - Mylyn 3.4 (June 23, 2010): 171
  - Mylyn 3.3 (Oct. 26th, 2009): 166
  - Mylyn 3.2 (June 24, 2009): 333
  - Mylyn 3.1 (March 4, 2009): 431
  - Mylyn 3.0 (June 25, 2008): 493
  - Mylyn 2.3 (Feb. 27, 2008): 158
  - Mylyn 2.2 (Dec. 19, 2007): 201
  - Mylyn 2.1 (Sep. 28, 2007): 120

Community

Unresolved Mylyn Bugs on Eclipse.org

Legend: Open Enhancements (total) — Open Defects (total)

Standards (Unchanged since 3.1)

- Mylyn requires J2SE 1.5, provides warning if installed on 1.4
    - Key driver for using1.5 was the benefits of generics-aware APIs
- Mylyn WikiText supports the following markup languages: Confluence, MediaWiki, Textile, TracWiki and Twiki.

UI Usability (Unchanged since 2.1)

- Accessibility
    - No review for this release, but following accessibility guidelines
    - http://www.eclipse.org/articles/Article-Accessibility/index.html
- Follow the User Interface Guidelines
    - Focus on consistent visual design, UI elements, icons
    - http://wiki.eclipse.org/index.php/User_Interface_Guidelines
- Validated UI usability with field study
    - For details see:
    http://kerstens.org/mik/publications/2006-11-mylar-fse.pdf
    - Mylyn Monitor is being used to gather usage feedback:
    http://mylyn.eclipse.org/monitor/upload/UsageAnalysisServlet

Schedule

- Project plan: http://www.eclipse.org/projects/project-plan.php?projectid=mylyn

Release	Date	Platform Release	Notes
Mylyn 3.4	June 23, 2010	Eclipse 3.4.2, 3.5.2 and 3.6	Helios
Mylyn 3.4.1	August 4, 2010	Eclipse 3.4.2, 3.5.2 and 3.6.1	Helios SR1
Mylyn 3.4.2	September 24, 2010	Eclipse 3.4.2, 3.5.2 and 3.6.1	
Mylyn 3.4.3	February 25, 2011	Eclipse 3.4.2, 3.5.2 and 3.6.2	Helios SR2
Mylyn 3.5	March 16, 2011	Eclipse 3.5.2, 3.6.2 and 3.7M6	
Mylyn 3.6	June 22, 2011	Eclipse 3.5.2, 3.6.2 and 3.7	Indigo
Mylyn 3.6.1	September 23, 2011	Eclipse 3.5.2, 3.6.2 and 3.7.1	Indigo SR1
Mylyn 3.6.2	February 24, 2012	Eclipse 3.5.2, 3.6.2 and 3.7.2	Indigo SR2

Communities(1)

- Users
    - Lively community on newsgroup and bug reports
    - Articles and blogs by community members
- Developers
    - Contributor documentation on Eclipsepedia
    - Lively community on mylyn-dev and bug reports
- Integrators
    - Integrator documentation on Eclipsepedia
    - Separate mylyn-integrators mailing list removes need for integrators to watch the higher-traffic mylyn-dev
    - Specific discussions on "[connector]" and "[bridge]" bug reports, as well as "manage integration with Foobar" bug reports

Communities

- Committers
  - 19 new committers since June 2009
- Summer of Code
  - Mylyn participated in Summer of Code 2009
  - Steffen Pingel mentored Markus Knittig who implented a Hudson integration.

IP Log

- Contributions are flagged as +iplog as they are applied.
- Aggregated IP log:
  - http://eclipse.org/projects/ip_log.php?projectid=mylyn,mylyn.builds,mylyn.commons,mylyn.context,mylyn.docs,mylyn.reviews,mylyn.tasks,mylyn.versions
- Sub-project IP logs:
  - Mylyn Builds: http://eclipse.org/projects/ip_log.php?projectid=mylyn.builds
  - Mylyn Commons: http://eclipse.org/projects/ip_log.php?projectid=mylyn.commons
  - Mylyn Context: http://eclipse.org/projects/ip_log.php?projectid=mylyn.context
  - Mylyn Docs: http://eclipse.org/projects/ip_log.php?projectid=mylyn.docs
  - Mylyn Reviews: http://eclipse.org/projects/ip_log.php?projectid=mylyn.reviews
  - Mylyn Tasks: http://eclipse.org/projects/ip_log.php?projectid=mylyn.tasks
  - Mylyn Versions: http://eclipse.org/projects/ip_log.php?projectid=mylyn.versions

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IP Log(2)

- Mylyn Commons, Mylyn Context, Mylyn Docs, and Mylyn Tasks ship code that was migrated from the Mylyn tools project for which contributions were tracked in a CSV file located at http://www.eclipse.org/mylyn/doc/mylyn-iplog.csv.

- Since the 3.4.3 release contributions are tracked through the automatic IP log but contributions applied in earlier releases are listed in the CSV file. It is planned to flag contributions listed in the IP log for a future release to fully migrate to the automatic IP log.

IP Issues

- None.

Release review version

- These slides are based on the following version of the Release review document

    - Version 032 – January 15, 2006